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ABSTRACT

A study was conducted to assess the academic performance of students who transferred from Piedmont Virginia Community College (PVCC) to the University of Virginia (UVA), using information on student application and acceptance rates, test scores, grade point averages (GPA's), and graduation rates. Data supplied by UVA on 291 students who transferred to the university from PVCC between 1978 and 1983 revealed that: (1) 68% of the PVCC students who applied to UVA were accepted; (2) since 1981, the number of PVCC students applying had increased and the percentage accepted had decreased; (3) 20% of the transfers had previously been denied admission to UVA; (4) generally, the GPA's of PVCC transfers compared favorably with those of non-transfer students by the end of the third year of college; (5) approximately 75% of the transfers ultimately graduated from UVA, with the highest graduation rate in the School of Education (89%) and the lowest in the Schools of Architecture and Engineering (50% each); (6) the average grade of those transfer students who did not graduate from UVA was a C+, which indicated that they failed to graduate for reasons other than scholastic performance; and (7) PVCC graduates and students who transferred from PVCC prior to graduation received degrees at UVA at about the same rate. (Author/HB)

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The Academic Performance Of Piedmont Virginia Community College Transfer Students At The University Of Virginia

July 1984

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Piedmont Virginia Community College
Charlottesville, Virginia

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Institutional Research and Planning Report No. 5-84

Dr. George B. Vaughan, President
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THE ACADEMIC PERFORMANCE

OF

PIEDMONT VIRGINIA COMMUNITY COLLEGE TRANSFER STUDENTS

AT THE

UNIVERSITY OF VIRGINIA

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Piedmont Virginia Community College
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THE ACADEMIC PERFORMANCE OF PIEDMONT VIRGINIA COMMUNITY COLLEGE STUDENTS AT THE UNIVERSITY OF VIRGINIA

EXECUTIVE SUMMARY

The academic performance of Piedmont Virginia Community College (PVCC) students who transferred to the University of Virginia (UVA) was studied to determine how well PVCC is preparing its students to perform at a major university. Eight questions were formulated to address the hypotheses.

The reader should note the following definition of terms. A transfer student is one who was accepted for admission at the University of Virginia after attending another institution of higher learning. A native student is one who matriculated as a first year student (freshman) at UVA.

Two limitations on the conclusions are noted. First, it is not known how many students matriculated at PVCC desiring to transfer to UVA. Therefore, it was difficult to make some inferences about the overall preparation of transfers. Second, the study does not address the relative quality of instruction at the two institutions.

The following are summaries of the major conclusions.

1. Sixty-eight percent of PVCC applicants to UVA have been accepted during the last six years as compared to 51% from other Virginia Community College System (VCCS) colleges. The percentage of PVCC students accepted has decreased since 1980 from 70% to 6[illegible]% while it has decreased from 62% to 40% for other VCCS colleges.

2. Twenty percent of transfers had been previously refused admission to UVA. Many of those rejected were counseled by UVA admissions officers to attend PVCC to take appropriate courses and then to reapply to UVA.

3. The ranks in high school class of transfers, although showing evidence of high school success and potential success in college, are not as positive overall as regular admissions. SAT scores for transfers are significantly lower than regular admissions on both Verbal and Quantitative measures.

4. PVCC transfers' Grade Point Averages (GPA) compare favorably with regular admissions at the end of the third year with the exception of the Commerce School. The mean GPA at graduation within two years after transfer are almost identical with the exception of the Commerce School.

5. Approximately 75% of transfers ultimately graduate, with the lowest percentage graduating from the College of Arts and Sciences (66%) and the School of Engineering (50%). Eighty-four percent of UVA's native students who were still enrolled at the beginning of their third year eventually graduate.

6. PVCC graduates (27.8) are older than PVCC non-graduates (26.0). Two-thirds of PVCC graduates and non-graduates are female. Ninety-three percent of transfers are Caucasian and 3% are Black. PVCC graduates attend PVCC significantly more quarters and earn significantly more credits than non-graduates. GPAs at PVCC and UVA of PVCC graduates and non-

graduates are almost identical. PVCC graduates are more likely to enter the Commerce and Education schools whereas non-graduates are more likely to enter the school of Arts and Sciences, Nursing, and Engineering.

8. The average grades of those transfers who do not graduate from UVA is about a C+ which indicates that as a group they fail to graduate for reasons other than scholastic performance.

9. PVCC graduates and non-graduates receive degrees from UVA at about the same rate.

Some questions have been raised as to the benefits of obtaining an Associates degree. PVCC graduates and non-graduates who transfer to UVA perform equally well scholastically at PVCC and UVA. Since the only differences noted were in age, the number of quarters of PVCC attendance, and the number of credits earned at PVCC, the report questions how important earning an associates degree is to future performance in a four year college or university.

There is strong evidence that the experiences of students at PVCC are helpful in obtaining admission to UVA and in doing well there academically.

THE ACADEMIC PERFORMANCE OF PIEDMONT VIRGINIA COMMUNITY COLLEGE STUDENTS AT THE UNIVERSITY OF VIRGINIA

INTRODUCTION

Piedmont Virginia Community College (PVCC) offers a rich variety of programs which seek to meet the needs of students. Obviously, the college is vitally concerned with providing students with the best possible education. One of the stated objectives of the funds received from the Title III Special Needs Program is "to develop and implement a general institutional plan for maintaining quality and integrity of the educational process." In accordance with this objective, the purpose of this report is to explain the findings of a study of the academic performance of PVCC transfer students at the University of Virginia (UVA). The major objective is to determine how well PVCC students were prepared academically to perform at a major state institution.

Students attend community colleges for numerous reasons. Some desire to ultimately attend a four-year institution, but for various reasons are not yet able to. Some have not done well scholastically at previous institutions and view this as an opportunity to improve on past performances. Therefore, all Virginia community colleges maintain a college transfer education program. The PVCC 1984-85 catalog contains the following statement. "The university parallel-college transfer programs include college freshman and sophomore courses in arts and sciences and pre-professional education meeting standards acceptable for trarsfer to baccalaureate degree programs in four-year colleges and universities."

Since 1978, approximately 55 PVCC students per year have transferred to UVA. Since this represents over 300 students, it is important that the PVCC staff and faculty learn how well these students have performed and to identify any areas of concern which need to be addressed.

It is also important to study the scholastic performance of PVCC transfer students because, as noted above, many of the transfers came to the college because they were unable or did not desire to attend a four-year institution or their previous scholastic performances were not positive. Some could not attend due to financial constraints while others did not have sufficient high school grades or standardized test scores to be admitted to UVA. According UVA admissions officers, some PVCC transfer students had been refused admission and were counseled to attend PVCC to take specific courses to demonstrate their ability to do college level work.

A major hypothesis of the study is that the students who transfer to UVA have lower high school grade point averages (GPA) and Scholastic Aptitude Test (SAT) scores than those who were accepted as UVA first year students (native students). It is hypothesized that PVCC's academic programs are strong enough to enable these students perform satisfactorily at a major university. To address these hypotheses, a series of research questions were developed to serve as a guide to the study. The questions are listed below and on the next page.

1. How many PVCC students applied to UVA and were accepted? How does this percentage contrast with other Virginia community colleges?

2. What proportion of PVCC transfers were denied admission to UVA prior to this acceptance as a transfer student?

3. How do high school rank in class and Scholastic Aptitude Tests (SAT) of the transfers compare with the UVA native students?

4. How many PVCC transfers had sufficient academic credits to become third year students upon matriculation at UVA? How do average GPAs of transfers and regular admissions compare at the end of the third year at UVA and at graduation? GPAs are to be compared by the UVA school entered.

5. How many PVCC transfers have graduated from UVA as of 12/31/83?

6. Do PVCC graduates and non-graduates who transfer to UVA differ on the following variables?

   a. Age
   b. Sex
   c. Race
   d. Number of quarters attending PVCC
   e. Number of credits earned at PVCC
   f. Average GPA at PVCC
   g. UVA school initially entered
   h. Average GPA at UVA. This is to be an overall comparison as well as by UVA school entered.
   i. Percentage who graduate from UVA for the entire group and by UVA school entered.

7. What is the average GPA of PVCC transfers who did not complete their studies at UVA? Do PVCC graduates and non-graduates fail to complete their UVA studies at different rates? Do the GPA's of those failing to complete their UVA studies differ by the UVA school entered?

8. Do PVCC graduates and non-graduates graduate from UVA at different rates. In other words, are PVCC graduates more likely to complete their studies at UVA than PVCC non-graduates?

METHODOLOGY

Data have been collected from various sources within UVA and PVCC. Because PVCC has no way of knowing which students actually transferred to a particular institution unless it is notified by the receiving institution, the authors depended on UVA to provide a list of students who previously attended PVCC. After receiving permission from UVA's Provost and Vice President for Student Affairs to conduct the study, the Office of Institutional Planning and Studies at UVA agreed to help gather the information relating to the research questions. All information was aggregated to protect the identity of students. The rank in class of transfers are not recorded on the university data bank. The UVA Office of Admissions kindly provided access to admissions records to enable the high school rank in class of transfers to be calculated.

Using 1978-1983 as the sample years, a total of 291 students were identified as transferring from PVCC to UVA. Those students matriculating during the last two years (1982,1983) could not be expected to have graduated and were on occasion excluded from the analyses if the question related to UVA graduates.

RESULTS

The results are presented in a format which relates the findings to the guiding research questions. Each question presented in the introduction is stated again and is then followed by tables and explanations which relate to it.

1. How many PVCC students applied to UVA and were accepted? How does this percentage contrast with other Virginia community colleges?

PVCC students have applied for transfer to UVA since the college opened in 1972. Table 1 shows how many applied, were accepted or denied, and the percent of those accepted who actually enrolled for the years 1978 to 1984.

Table 1

PVCC Transfer Applications To UVA And The Results Of The Application 1978-1984

	Year of Application						
	78	79	80	81	82	83	84(To date)
Number Applied	91	76	74	96	120	119	92
Number Accepted	65	57	52	60	76	73	54
Percent Accepted	71	75	70	63	63	61	59
Percent Denied	29	25	30	29	37	39	Unknown
Percent Accepted Who Enrolled	80	86	92	87	93	83	Unknown

The data indicate that 68% of those applying for admission from 1978 to 1983 were accepted. Since 1981, the number applying has increased and the percentage accepted has decreased. Eight-seven percent of those accepted at UVA matriculate.

In Table 2, the same information that is contained in Table

1 is used to show the transfers from Virginia's community colleges excluding PVCC.

Table 2

Virginia Community College Transfer Applications To UVA And The Results Of The Application. PVCC Transfers Are Not Included.

	Year of Application						
	78	79	80	81	82	83	84(To date)
Number Applied	141	157	140	151	131	146	Unknown
Number Accepted	79	66	84	94	59	58	
Percent Accepted	56	42	60	62	45	40	Unknown
Percent Denied	44	58	40	38	55	60	Unknown
Percent Accepted Who Enrolled	73	67	71	75	80	76	Unknown

When compared to PVCC applicants, students from other Virginia community colleges are not accepted in as large a number. Like PVCC applicants, the percentage of VCCS college transfer applicants who are accepted has decreased since 1981. Since 1978, PVCC has provided 51% of the VCCS students who enrolled at UVA.

The Assistant Dean of Admissions indicated why a higher percentage of PVCC transfer applicants are accepted than other VCCS colleges. PVCC students live close enough to UVA to easily come for interviews. During the interviews, they are given a realistic estimate of their chances for admissions and are told which classes to take at PVCC. Therefore, it is likely that a higher percentage of PVCC students are submitting applications which will be accepted.

2. What proportion of PVCC transfers were denied admission to UVA prior to this acceptance as a transfer student?

Because it is known from conversations with UVA admissions officers that UVA counsels some students to come to PVCC to demonstrate they are capable of successfully completing college work or to improve on past performances, it is important to know what percentage of the PVCC transfers were previously refused UVA admission. This is shown in Table 3.

Table 3

PVCC Transfers Previously Rejected By UVA.
PVCC Transfers Entering 1978-1983.

Previously Rejected	Frequency	Percent
No	233	80
Yes	58	20
Total	291	100

Approximately 20% of those who eventually transferred from PVCC to UVA had previously applied to the University and were rejected.

3. How do high school rank in class and Scholastic Aptitude Tests (SAT) of the transfers compare with the UVA native students?

One hypothesis of the PVCC administration is that the college helps its students gain skills and knowledge which enables them to successfully compete at UVA. This "value-added" concept is especially relevant because one might begin to say that PVCC gives a quality education to transfers if the transfers have poorer high school ranks and GPAs than regular admissions to UVA and yet performed as well as regular admissions after they

transferred to UVA.

Table 4 contrasts the high school rank of UVA regular admissions and PVCC transfers. Rank was obtained by dividing the student's rank in high school class by the total number of graduates in the class. The resulting percentage is then categorized according to deciles. For example, Student A, Joe Piedmont, ranked 158 out of 336 graduates at Albemarle High School. One hundred fifty-eight divided by 336 equals .47 or the 47th percentile. The 47th percentile is in the fifth decile. The fifth decile in Table 4 below is designated as "5th & Below".

Due to missing data or difficulties in collection, the PVCC sample is 87 students. Roughly 25% of the 1981-1983 PVCC transfers' high school ranks and 84% of the 1984 high school ranks were found. Mr. Larry Groves, Assistant Dean of Admissions at UVA felt the results would, however, be representative of all PVCC transfers.

Table 4

High School Rank In Class For:
UVA Students Entering 1976-1979.
PVCC Transfers Entering 1981-1984.
UVA Native Students Graduating 1980-1983.
Percent Of Native Students Graduating.
Ranks Are In Percentages.

	Decile					
	1st	2nd	3rd	4th	5th & Below	Missing
All UVA Regular Admission (Native) Students	56	22	9	4	4	6
PVCC Transfers	13	23	17	9	22	16
UVA Graduates	59	22	8	3	3	6
Percent Graduating	75	70	62	61	54	67

UVA regular admissions tend to have higher ranks than the average PVCC transfer. A much higher percentage of PVCC transfers (31%) ranked in the fourth decile and below than the native admissions (8%). However, 53% of the transfers ranked at least in the top 30% of their high school class.

The PVCC rank in class may be somewhat misleading because approximately 25% of all nursing transfers already possess a Bachelors degree. Although the sample is small, their average rank tends to be slightly higher than other PVCC transfers and slightly worse than regular admissions. Several nursing transfers hold degrees from UVA.

Another measure of the relative academic positions of

transfers and regular admissions prior to UVA matriculation is scores on standardized achievement tests (SAT). If PVCC transfers had significantly lower scores than UVA native students, one might assume that transfers would be less likely to be successful than the native UVA student. Table 5 compares SAT Mathematics, SAT Verbal, and SAT Total for both groups.

Table 5

Comparison Of SAT Scores For UVA Native Students
Vs. PVCC Transfer Students
UVA Students Entering 1976-1979
PVCC Transfers Entering 1978-1983

Test	School	Number	Mean	T Ratio	Sign.
SAT Verbal	PVCC	218	507	11.77	.0001
	UVA	10131	585		
SAT Math	PVCC	214	520	16.95	.0001
	UVA	10131	622		
Total	PVCC	214	1027	17.197	.0001
	UVA	10131	1207		

Using a t-statistic to measure whether the difference between groups was statistically significant, one finds that PVCC transfers scored lower than regular admissions on all three measures. Using the average Total SAT scores of 1027 for PVCC and 1207 for UVA, the average PVCC score would be in the bottom 10% of all UVA regular admissions. Stated another way, ninety percent of regular admissions scored above the average Total SAT for PVCC transfers.

4. How many PVCC transfers had sufficient academic credits to become third year students upon matriculation at UVA? How do average GPAs of transfers and regular admissions compare at the end of the third year at UVA and at graduation? GPAs are to be compared by the UVA school entered.

The first year at a new college is the most crucial for transfers. Typically, the GPA of the transfer will drop due to the transition period required. To give meaning to the data, it is also important to know how many students were not considered third year students. This is particularly important in this study because the information provided by UVA lists as missing those transfers who do not show up on their data bank as third year students. This complicating factor must be considered when reviewing several tables. Efforts were made to find data which would indicate how well all students eventually performed at UVA and these data are shown in several tables. Table 6 indicates the academic level of transfers upon initial transfer. Tables 7 and 8 show the GPA after the third year by the UVA college entered and as a whole.

Table 6

Initial UVA Academic Levels Of PVCC Transfers Entering 1978-1983.

Year	Number	Percent
Missing	7	3
First	41	15
Second	36	13
Third	156	57
Fourth	16	6
Special Non Degree	18	7
TOTAL	274	101 *

* Percentages were rounded and some will not total to 100.

Table 6 shows that at least 28% of the transfers did not

have sufficient credits to be considered third year students. Again, this is important to note when inspecting many of the following tables because some students considered "missing" may not have stopped out but rather did not have sufficient credits to be at a particular level when the data were analyzed. This can be readily seen in Table 7.

Table 7

GPA After Third Year At UVA--By School Entered
PVCC Transfers Entering 1978-1982
UVA Students Entering 1976-1979
Percentage Of Missing Students Is In Parentheses.

	PVCC Transfers			UVA Regular Admission		
UVA School	N	N Missing	GPA	N	N Missing	GPA
Arts & Sciences	64	9(12)	2.93	5440	365(6)	2.94
Nursing	35	13(27)	3.30	197	1(0.5)	3.08
Architecture	2	0(0)	3.14	286	34(11)	3.02
Commerce	46	4(8)	2.63	891	22(2)	3.15
Engineering	19	3(14)	3.07	1123	89(7)	2.96
Education	34	9(21)	3.30	275	6(2)	3.04

Transfers who are fourth year students on UVA data bank after one year at UVA compare favorably in GPAs with regular admissions in most instances. The only school where they tend to do less well is the Commerce School where they score one half grade point lower. These data seem to support the reports to PVCC that PVCC transfers to the Commerce School have more difficulties than do regular admissions students.

Table 8

GPA At the End Of The Third Year At UVA
For Transfers And UVA Native Students.
PVCC Transfers Entering 1978-1982.
UVA Students Entering 1976-1979.
Percentage of Missing Students Are In Parentheses.

Institution	Number	Number Missing	Mean
PVCC	200	38(16)	3.00
UVA	8620	1574(15)	2.97

Table 8 indicates that, as a whole, PVCC transfers who are listed on UVA's data bank as completing the third year have GPAs as positive as UVA native students who are completing their third year.

Table 9 contrasts transfers with regular admissions at graduation.

Table 9

GPA at Graduation Within Two Years Of Entering
The Third UVA Academic Year By UVA School Entered.
PVCC Transfers Entering 1978-1982
UVA Students Entering 1976-1979
Percentages Missing Are Given In Parentheses.

UVA School	PVCC Transfers N	PVCC Transfers N Missing	PVCC Transfers GPA	UVA Regular Admission N	UVA Regular Admission N Missing	UVA Regular Admission GPA
Arts & Sciences	27	35(56)	3.11	4687	1118(19)	3.06
Nursing	21	15(42)	3.41	182	16(8)	3.19
Architecture	1	1(50)	3.59	267	53(17)	3.12
Commerce	34	6(15)	2.81	875	38(4)	3.17
Engineering	4	14(78)	3.08	842	370(31)	3.12
Education	25	3(11)	3.44	253	28(10)	3.14
TOTAL	112	74(40)	3.15	8620	2916(25)	3.09

The only major GPA difference noted between transfers and regular admissions is for the Commerce School. Overall, PVCC transfer students do as well academically as do UVA native students.

One might wonder why a higher percentage of PVCC transfers do not seem to graduate. The answer seems to reside in the fact that not all transfers entered with enough credits to be considered third year students and thus could not be expected to graduate within two years.

The GPAs of PVCC transfers who graduated within two years of matriculation were contrasted with UVA native students. These data are shown in Table 10. It should be noted that some of

those missing from PVCC are those who did not have enough credits at matriculation to be expected to graduate within two years.

Table 10

GPA At Graduation Within Two Years Of Beginning
The Third Academic Year At UVA.
PVCC Transfers Entering 1978-1981.
UVA Students Entering 1976-1979.

Institution	Number	Number Missing	Mean
PVCC	112	74(40)	3.15
UVA	8620	2916(25)	3.09
T-Ratio 1.59 Not Significant			

A test of differences between the mean GPAs show no statistically significant difference. Therefore, PVCC transfers' and UVA native students' GPAs at graduation within two years of beginning the third academic year at UVA are not different.

5. How many PVCC transfers have graduated from UVA as of 12/31/83?

Table 11 gives the graduation rates by school and Table 12 combines the schools for regular admissions and PVCC transfers as of 12/31/83. This group would expect to include most of those who did not have sufficient credits at matriculation to be considered third year students in the above tables but who ultimately graduated. This should help determine the relative graduation rates at UVA.

Table 11

PVCC Transfers Graduating From UVA By School Entered-12/31/83.
PVCC Transfers Entering 1978-1981.

School	N	Missing	%	UVA Graduate Status Non Graduate	%	Graduate	%
Arts & Sciences	62	5	8	16	26	41	66
Nursing	36	7	19	3	8	26	72
Architecture	2	1	50	0	0	1	50
Commerce	40	2	5	5	13	33	83
Engineering	18	2	11	7	39	9	50
Education	28	0	0	3	11	25	89

Schools where there are not high graduation rates are Arts and Sciences and Engineering.

Table 12

Graduation Rates At The University Of Virginia
UVA Students Entering 1976-1979
PVCC Transfers Entering 1978-1981

School	Total	Number Graduating	Percent	Number Non Grads	Percent
PVCC	186	135	73	51	27
UVA	8620	7278	84	1342	16

Table 12 compares graduation rates for UVA native students and PVCC transfers who had sufficient credits to be third year students at UVA. Only 16% of UVA regular admissions entering their third year fail to graduate while the PVCC figure is 27%. Over the full four years, 25% of UVA regular admissions fail to

graduate. Because of the uncertainties in knowing which PVCC students desire to be transfers when they enter PVCC, it is difficult to determine what percentage of PVCC students fail to complete four years of study.

When the data was first compiled, it was noted that 67% of transfers listing PVCC as their previous school were not PVCC graduates. To determine whether some important distinctions might exist between PVCC graduates and non-graduates, comparisons were made on the variables listed in Question 6.

6 Do PVCC graduates and non-graduates who transfer to UVA differ on the following variables?

a. Age
b. Sex
c. Race
d. Number of quarters attending PVCC
e. Number of credits earned at PVCC
f. Average GPA at PVCC
g. UVA school initially entered
h. Average GPA at UVA. This is to be an overall comparison as well as by UVA school entered.
i. Percentage who graduate from UVA for the entire group and by UVA school entered.

Table 13 looks at the differences in age.

Table 13

Age Of PVCC Transfers By PVCC Graduate, Non Graduate.
Age Computed As of 9/1/Year Entered UVA.
PVCC Transfers Entering 1978-1983.

Type	Number	Mean
Graduate	89	27.8
Non Graduate	182	26.0

The average age of transfers at UVA matriculation is 26.6 years while the average UVA student who enters directly from high school is approximately 20 years old at the beginning of the

third year. The PVCC graduate is 1.8 years older than the non-graduate. This difference is also statistically significant. The PVCC transfer is obviously older than his or her UVA classmates. The PVCC graduate is even older than the PVCC non-graduate who transfers to UVA.

Table 14 contrasts the sex of PVCC graduates and non-graduates.

Table 14

Sex Of PVCC Transfers By PVCC Graduate Status.
PVCC Transfers Entering UVA 1978-1983.

Sex	N	Graduates	Percent	Non Graduates	Percent
Females	176	58	33	118	67
Males	98	33	34	65	66

Female transfers outnumber males by 2 to 1. There is no difference between PVCC graduates and non-graduates regarding sex. While female comprise 67% of the total transfers, females at UVA comprise slightly more than one half of the undergraduate enrollment.

Table 16 compares transfers on ethnic origin.

Table 16

Ethnic Origin Of PVCC Transfers By PVCC Status.
Race Is Based On Self-Designation By The Student.
PVCC Transfers Entering UVA 1978-1983.

Race	N	Non Graduate	Percent	Graduate	Percent
Missing	5	3	60	2	40
Asian	3	2	67	1	33
Black	8	4	50	4	50
Caucasian	258	174	67	84	33

Due to small number of minority transfers, it is difficult to determine whether any ethnic group is overrepresented or underrepresented as PVCC graduates or non-graduates. Caucasian students represent 94% of the transfers and blacks represent 3%. Since blacks represent 8% of the PVCC matriculants, they seem to be underrepresented in those who transfer to UVA. Although it is not known how many blacks have applied for admission during the past several years, they represent only 5% of the 1984 applicants and 2.5% of those accepted.

Table 17 contrasts the number of PVCC quarters of attendance of PVCC graduates and non-graduates. The maximum and minimum number of quarters attended is also given.

Table 17

Quarters At PVCC.
PVCC Transfers To UVA 1980-1983.

PVCC Status	N	Mean	Minimum	Maximum
Graduates	63	10	4	21
Non Graduates	129	6	2	17

As might be expected, PVCC graduates attended PVCC more quarters than non-graduates. There also seems to be a wide range of quarters attended for both groups. A test of differences in means found that this difference is statistically significant.

Table 18 compares graduates and non-graduates on the number of credits earned at PVCC.

Table 18

Credits Earned At PVCC By PVCC Status.
PVCC Transfers To UVA 1980-1983.

PVCC Status	N	Mean	Minimum	Maximum
Graduates	63	102	43	179
Non Graduates	129	56	3	128

Graduates tend to earn almost twice as many credits as non-graduates. Graduates earned significantly more credits at PVCC than non-graduates.

Thirty-three percent of 1980-1983 transfers had attended institutions of higher education before PVCC. Table 19 adds the credits earned by some transfers at other institutions prior to entering PVCC. This includes at least nine known to already possess Bachelors degrees. All but one of the nine were entering

nursing. PVCC accepted an average of 35 quarter hour credits per student. Only one of those with a Bachelors had quarter hours accepted by PVCC. The minimum and maximum number of credits is also given. All previously earned credits were converted to quarter hours by the PVCC Office of Admissions and Records.

Table 19

Total Credit Hours Earned At Transfer. Includes PVCC and Non PVCC Coursework.
PVCC Transfers To UVA 1980-1983.

PVCC Status	N	Mean	Minimum	Maximum
Graduates	63	116	96	212
Non Graduates	129	64	3	143

The average graduate has earned more than enough credits to graduate from PVCC while the average non-graduate has earned two thirds of the required (96) credits to enter UVA as a third year student. One non-graduate had earned only 3 credits before transferring.

Do PVCC graduates and non-graduates earn different GPAs at PVCC? This is shown in Table 20 along with the minimum and maximum grades earned.

Table 20

Mean GPA Earned At PVCC By PVCC Status.
PVCC Transfers To UVA 1980-1983.

PVCC Status	N	Mean	Minimum	Maximum
Graduates	63	3.58	2.79	4.00
Non Graduates	129	3.52	2.61	4.00

The mean GPA's for both groups are almost identical which means that PVCC graduates and non-graduates transfer to UVA with virtually the same GPAs.

To determine whether some types of students are more likely to enter particular schools, Table 21 shows which UVA school the transfers entered into.

Table 21

UVA School Initially Entered By PVCC Status.
PVCC Transfers Entering 1978-1983.

School	N	Non Graduates	Percent	Graduates	Percent
Arts & Sciences	81	59	73	22	27
Nursing	56	53	95	3	5
Architec-ture	2	1	50	1	50
Commerce	61	26	43	35	57
Engineering	24	19	79	5	21
Education	50	25	50	25	50

Table 21 shows several distinctions among the transfers. Students entering the College of Arts and Sciences, School of Nursing, and School of Engineering are more likely to be PVCC

non-graduates while those entering the School of Commerce and the School of Education are more likely to be PVCC graduates.

Although the reasons for transfers deciding to earn or not earn a PVCC degree is not thoroughly documented, a discussion by this author with a friend who entered the UVA Nursing School sheds some light on that particular school and may be meaningful in light of the overwhelming number of nursing transfers who are PVCC non-graduates. He said he attended PVCC to take particular courses which he was told were necessary to matriculate at UVA. He said he did not earn a PVCC degree because he would have been required to repeat several PVCC courses at UVA and found it was a better use of his time to transfer before receiving the degree. He has since graduated from UVA and says his experience at PVCC was very helpful in preparing him for UVA. As has been mentioned previously, a number of nursing transfers possess Bachelors degrees. From 1981 to 1983, at least 25% of the nursing matriculants held Bachelors. None received a PVCC degree.

Table 22 shows the grades of transfers at the end of one year at UVA and is broken down by PVCC graduates and non-graduates.

Table 22

GPA After One Year At UVA By PVCC Graduate Status.
PVCC Transfers Entering 1978-1982.

Graduate Status	Number	Number Missing	Mean GPA
Non Graduates	133	28(17)	3.02
Graduates	67	10(13)	2.97

The GPAs of PVCC graduates and non-graduate transfer students is virtually identical. One should note that 13% of the PVCC graduates did not finish their first year at UVA. The stopout rate of non-graduates may be misleading due to insufficient credits to be considered UVA third year students. Only 1% of the UVA regular admissions, however, stopped out their third year. Therefore, PVCC transfers are more likely than the UVA native students to stopout during the third academic year.

Table 23 looks at differences in GPAs after one year for PVCC graduates and non-graduates by the UVA school they entered.

Table 23

GPA After One Year At UVA By PVCC Status And School Entered.
PVCC Transfers Entering 1978-1982.

School	PVCC Status	N	N Missing	PVCC GPA
Arts & Sciences	Non Grad	48(86)	8(14)	2.93
	Graduate	16(94)	1(6)	2.92
Nursing	Non Grad	34(72)	13(28)	3.30
	Graduate	1(100)	0(0)	3.50
Architecture	Non Grad	1(100)	0(0)	2.75
	Graduate	1(100)	0(0)	3.53
Commerce	Non Grad	18(95)	1(5)	2.45
	Graduate	28(90)	3(10)	2.74
Engineering	Non Grad	17(94)	1(6)	3.06
	Graduate	2(50)	2(50)	3.17
Education	Non Grad	15(75)	5(25)	3.34
	Graduate	19(83)	4(17)	3.27

No meaningful differences are noted except for the fact

that, as already shown previously, Commerce School students tend to have lower GPAs than the other PVCC transfers.

8. Do PVCC graduates and non-graduates graduate from UVA at different rates. In other words, are PVCC graduates more likely to complete their studies at UVA than PVCC non-graduates?

Although the number stopping out is small, Table 24 shows the GPAs of students who stopped out after one year at PVCC. Those noted as missing were enrolled less than three semesters at UVa. Table 24 shows the GPAs by school entered.

Table 24

GPA Of PVCC Stop Outs At UVA After One Year By PVCC Status. PVCC Transfers Entering 1978-1982.

PVCC Status	N	N Missing	Mean
Non Graduates	11	8	2.62
Graduates	6	4	2.61

Although PVCC graduate and non-graduate stopouts have similar GPAs, the mean GPA of stopouts is lower than the approximate 3.00 of those not stopping out. However, the stopouts' mean GPA is still within a range which would qualify them to be in good standing academically. Obviously, because of their acceptable GPAs, some stopped out for reasons other than academics.

Table 25

GPA Of PVCC Stopouts At UVA After One Year In School Entered.
PVCC Transfers Entering 1978-1982.

School	N	N Missing	Mean
Arts & Science	10	5	2.61
Nursing	1	1	3.50
Architecture	1	0	3.52
Commerce	2	1	0.87
Engineering	3	2	3.25
Education	0	3	0.00

Although these GPAs by school are few in number, it still allows one to see that some stopouts had good to excellent grades prior to their stopping out.

Table 26 contrasts the graduation rate at UVA of PVCC graduates and non-graduates.

Table 26

PVCC Graduation By UVA Graduation
Within Two Years For PVCC Transfers.
Transfers Entering 1978-1981.

		UVA Status			
PVCC Status	N	Grad	Percent	Non Grad	Percent
Non Graduate	128	66	52	62	48
Graduate	58	46	79	12	21

PVCC graduates, who have sufficient credits to be third year UVA students upon matriculation, graduate at a rate of 79% within two years of their matriculation. On the other hand, 52% of PVCC non-graduates, who are not all third year students, graduate

within two years of transferring to UVA. These rates contrast with the 86% of UVA native students who are still in school at the beginning of their third year and graduate. Table 27 compares UVA graduation rates for PVCC graduates and non-graduates as of 12/31/83.

Table 27

PVCC Transfers Graduating From UVA By 12/31/83.
PVCC Transfers Entering 1978-1981.

			UVA Graduate Status				
PVCC Status	N	Missing	%	Non Graduate	%	Graduate	%
Non Graduate	128	11	9	26	20	91	71
Graduates	58	4	7	8	14	46	79

The graduation rates of these two groups are virtually the same. Overall, at least 75% of the PVCC transfers (graduate and non-graduate) could be expected to graduate from UVA.

The concluding section of this report seeks to summarize the findings of this study and make some conclusions about the performance of PVCC transfer students at UVA.

CONCLUSIONS

There are several important conclusions which are indicated by the results of the study on the scholastic performance of Piedmont Virginia Community College transfer students at the University of Virginia. It is necessary, however, to note some limitations on the inferences which can be drawn from the study. When one desires to compare several groups of students (transfers vs. regular admissions, PVCC graduates vs. non-graduates), it is important that all relevant data be available. An important piece of missing information is that one does not know the total number of students entering PVCC with intentions of transferring to a four-year college or university or particularly UVA. Approximately 64 PVCC transfer students are accepted each year at UVA. It is hypothesized that of the 119 applying to UVA in 1983, most began PVCC with the intention to transfer. It is probable that more than 119 entered PVCC desiring to transfer to UVA.A finding that many who matriculated at PVCC and were not initially prepared for UVA were eventually were accepted at UVA could be a very positive statement about PVCC. This study did not investigate how well the students rejected by UVA have subsequently done scholastically or what their initial academic credential were. The focus of the results and conclusions is on those who were successful enough at PVCC and other institutions to be accepted as transfer students to UVA.

This study does not attempt to address the issue of relative competence of instruction at the two institutions.

Given the above limitations, the following are the

conclusions of the study.

1. PVCC students, when contrasted with other Virginia community colleges, are more successful in being accepted into UVA. In 1983, they comprised 45% of the applicants and 55% of those accepted from community colleges. The admissions officers at UVA indicated that the close working relationship with PVCC and the familiarity of applicants with UVA criteria for acceptance probably make only those most likely to be accepted apply for admission. While making no effort to compare different institutions, the admissions officers stated that PVCC transfers have a "good track record" at UVA and those who do well (3.0 GPA or above) at PVCC are viewed favorably in the admissions process.
2. There is no such thing as a typical transfer. The UVA admissions records indicate that PVCC transfer students have a wide range of school and work experiences. Some had done poorly at other schools and came to PVCC to improve their records. Others had worked for several years while attending PVCC part time. Some had graduated from high school as many as ten to fifteen years ago while at least two had Graduate Equivalent Degrees(GED). They are obviously more diverse than the typical undergraduate regular admission student coming directly from high school.
3. PVCC transfers' high school rank in class, although indicating, in most instances, success at that level, are not as positive as UVA regular admissions. This is true for those who had Bachelors degrees from other institutions.

4. PVCC transfers' SAT scores are 150 points lower than UVA regular admissions. In fact, they are in the lowest 10% of those admitted to UVA. One must note, however, that the average PVCC transfer's SAT score, 1027, is in the top 45% of all students taking the test nationally. The average UVA student, on the other hand, is in the top 5% of all students taking SATs nationally. Although the transfers' SATs are lower than the native UVA students', they are high enough to give evidence of scholastic potential and would permit entry into numerous four-year colleges and universities. Essentially, the PVCC transfers are being compared with some of the more gifted students in the country.

5. With the exception of Commerce students and transfers who do not stop out, PVCC transfers do as well academically as UVA regular admissions in their third and fourth years. Seventy-five percent of all PVCC transfers, including Commerce, graduate as compared with 84% of UVA regular admissions who enter the third year.

6. The results of the comparison of PVCC graduates and non-graduates are enlightening. As expected, non-graduates attended PVCC for less quarters and earned less credits than graduates. However, each group's mean GPA at PVCC is almost identical. The graduates, however, are older. When PVCC non-graduates enter UVA, they tend to perform as well as PVCC graduates. Because non-graduates often enter as second, or even in some cases, as first year students, they do not graduate as often within two years. When the two

groups were contrasted for UVA graduate standing as of 12/31/83, there was virtually no difference. The two groups tend to enter different schools.

7. The finding of no meaningful difference in scholastic performance at UVA between PVCC graduates and non-graduates begs a more fundamental question: What good does earning an associates degree do for those students who desire to transfer to a four year institution? From a purely quantitative viewpoint, there seems to be no academic reason for earning a PVCC degree. The answer probably lies within each student and is therefore more qualitative in nature. The typical PVCC graduate takes two and a half academic years to complete the associates degree which may indicate that he or she worked while attending PVCC. The degree may be a sign of success and thus encourages the student to continue his or her education. It is recommended that the reasons why some transfer students desire an associates degree and others do not be investigated further.

The overall finding is that students from PVCC who ultimately matriculate at UVA are well prepared to compete scholastically with the native UVA student. They come to PVCC with diverse experiences and, for the most part, with specific objectives. They have spent several years determining their goals and view PVCC as an intermediate step in accomplishing them. There are strong indications that their scholastic experiences at PVCC have helped them when they enter the highly competitive courses and programs at UVA.

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